Restoration Aquaculture of the Pinto Abalone *(Haliotis kamtschatkana)*

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Although the Washington State Pinto abalone fishery was closed in 1994, abundance and population density remain low at many sites. The population may be too depressed for natural recovery. This experiment was undertaken to develop the best possible rearing methods for Pinto abalone to be outplanted. Juvenile *Haliotis kamtschatkana* were raised under two different treatment regimes, either in tanks enriched with sea urchins and coralline algae encrusted rock or in conventional tanks. Animals were assessed every four weeks to compare growth, survival, and shell coloration between treatments. Preliminary data suggest that shell length and wet weight are significantly greater in animals from enriched tanks. Although color has changed dramatically in both treatments, no differences between treatments are evident. Further experiments will assess habitat selection and predator avoidance in animals raised under the two treatment regimes. Additional studies have begun using mitochondrial DNA markers to assess the phylogeography of this species. Samples have been collected from sites in Alaska, California, and Washington State, as well as British Columbia, Canada.